

CLAIMS

1. A material guide device, comprising:
  - a guide bush having a material introducing end and a material lead-out end, as axially opposite ends, and including a hollow-tubular material support section elastically displaceable in a radial direction about a guiding axis; and
  - an adjusting mechanism for adjusting a radial dimension of said material support section of said guide bush;
- said adjusting mechanism comprising:
  - a carrying member carrying said guide bush, and having a front face disposed around said material lead-out end of said guide bush;
  - a pressing member disposed near said front face of said carrying member and movable relative to said carrying member and able to make a relative linear motion along said guiding axis relative to said guide bush, the pressing member causing an elastic displacement in said radial direction on said material support section by said relative linear motion; and
  - a feed screw structure causing said relative linear motion between said pressing member and said guide bush by a mutual screwing motion of threads.
2. A material guide device as set forth in claim 1, further comprising a manipulation section disposed near said front face of said carrying member at a position remote from said material introducing end of said guide bush, for manipulating said feed screw structure to cause said screwing motion.
3. A material guide device as set forth in claim 1, wherein said feed screw structure is provided between said carrying member and said pressing member.
4. A material guide device as set forth in claim 3, wherein said guide bush is secured relative to said carrying member in a direction along said guiding axis.
5. A material guide device as set forth in claim

3, wherein said carrying member has an internal thread; and wherein said pressing member has an external thread adapted to be screwed on said internal thread to constitute said feed screw structure.

5           6.    A material guide device as set forth in claim 3, wherein said carrying member has an external thread; and wherein said pressing member has an internal thread adapted to be screwed on said external thread to constitute said feed screw structure.

10           7.    A material guide device as set forth in claim 1, wherein said adjusting mechanism further comprises a manipulating member disposed near said front face of said carrying member and adjacent to said pressing member; and wherein said feed screw structure is provided between  
15 said carrying member and said manipulating member.

          8.    A material guide device as set forth in claim 7, wherein said guide bush is secured relative to said carrying member in a direction along said guiding axis.

20           9.    A material guide device as set forth in claim 1, wherein said feed screw structure is provided between said pressing member and said guide bush.

          10.   A material guide device as set forth in claim 9, wherein said guide bush is secured relative to said carrying member in a rotational direction about said  
25 guiding axis.

          11.   A material guide device as set forth in claim 1, wherein said feed screw structure is provided between said carrying member and said guide bush.

30           12.   A material guide device as set forth in claim 11, wherein said guide bush is secured relative to said pressing member in a rotational direction about said guiding axis.

35           13.   A material guide device as set forth in claim 1, wherein said adjusting mechanism further comprises an anchoring member, disposed near said front face of said carrying member, for inhibiting said screwing motion of said feed screw structure.

14. A material guide device as set forth in claim 1, wherein a fitting portion is provided between said carrying member and said pressing member, for holding said carrying member and said pressing member in a coaxial arrangement relative to each other.

15. A material guide device as set forth in claim 1, wherein a fitting portion is provided between said carrying member and said guide bush, for holding said carrying member and said guide bush in a coaxial arrangement relative to each other.

16. A material guide device as set forth in claim 1, wherein a fitting portion is provided between said pressing member and said guide bush, for holding said pressing member and said guide bush in a coaxial arrangement relative to each other.

17. An automatic lathe comprising the material guide device as set forth in claim 1, wherein said material guide device is installed in proximity to a working location of machining of an objective material.

18. A material guide device, comprising:

a guide bush having a material introducing end and a material lead-out end, as axially opposite ends, and including a hollow-tubular material support section elastically displaceable in a radial direction about a guiding axis; and

an adjusting mechanism for adjusting a radial dimension of said material support section of said guide bush;

said adjusting mechanism comprises:

a carrying member having a front face disposed around said material lead-out end of said guide bush, and carrying said guide bush in a state as to be secured in a rotational direction about said guiding axis;

a pressing member disposed, near said front face of said carrying member, to be able to make a relative linear motion along said guiding axis relative

to said guide bush, the pressing member causing an elastic displacement in said radial direction on said material support section by said relative linear motion; and

5                                   a feed screw structure disposed near said front face of said carrying member at a position remote from said material introducing end of said guide bush, for causing said relative linear motion between said pressing member and said guide bush by a mutual  
10   screwing motion of threads.

19. An automatic lathe comprising the material guide device as set forth in claim 18, wherein said material guide device is installed in proximity to a working position for machining, performed on an objective  
15   material.